



# Agenda





Time	Module Title	Speaker
8:30 am – 8:35 am	Welcome & Introductions	Kevin Laviano Ryan Okahara, Hawaii Field Office Director
8:35 am – 8:45 am	Regional Leadership Remarks	Jason Pu, Regional Administrator (virtual)
8:45 am – 9:45 am	General Session	Ashley Leia Sheriff, Deputy Assistant Secretary of REAC
9:45 am – 10:30 am	Policy	Tara Radosevich
10:30 am – 10:45 am	Break	
10:45 am – 12:00 pm	Standards	Ashley Leia Sheriff Tara Radosevich
12:00 pm – 1:00 pm	Lunch	
1:00 pm – 1:30 pm	Standards Q&A	Ashley Leia Sheriff
1:30 pm – 2:30 pm	Scoring Model	Ashley Leia Sheriff
2:30 pm – 2:45 pm	Break	
2:45 pm – 3:45 pm	Operations & IT Information	Kevin Laviano
3:45 pm – 4:00 pm	Closeout	Ashley Leia Sheriff
1:00 pm – 1:30 pm 1:30 pm – 2:30 pm 2:30 pm – 2:45 pm 2:45 pm – 3:45 pm	Standards Q&A Scoring Model Break Operations & IT Information	Ashley Leia Sheriff  Kevin Laviano

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#### Introduction



Customer Continuous Improvement
Health & Safety & Quality

Change

Innovation
Resident
Inspections

Technology Inspections

**Customer Centricity** 

**Connectivity** 

**Standards** 



### **Value Statement**



NSPIRE transforms the way HUD manages the quality of affordable housing units, by integrating operations, utilizing advanced analytics, and improving assessments to prioritize the health and safety of residents.





#### What is NSPIRE?



# HUD's National Standards for the Physical Inspection of Real Estate (NSPIRE) strengthens HUD's physical condition standards, known as the Uniform Physical Condition Standard (UPCS) by:

- Prioritizing health, safety, and functional defects over appearance
- Updating HUD's physical inspection model, which is now 20+ years old
- Focusing on the areas that impact residents their units
- Providing a more accurate score for property conditions
- Aligning inspection standards across all HUD-assisted properties, as directed by Congress
- Incorporating resident feedback regarding the condition of units



### Goals





- ✓ Ensure families are living in safe and tenantable homes
- ✓ Facilitate year-long maintenance with a unit-focused approach
- ✓ Prioritize residents over properties
- ✓ Explore resident feedback for better quality service

# **PROPERTIES**Health and Safety

- ✓ Better identification of substandard housing through clear, defined inspection protocols
- ✓ Increase inspection consistency
- ✓ Modernize health and safety standards
- ✓ Ensure homes are safe and suitable for residential use

#### **PROGRAMS**

Modernize HUD's Inspection Process

- ✓ Modernize HUD's physical inspection process
- ✓ Improve service delivery for our residents and housing principles
- ✓ Align multiple inspection standards into a clear, defined inspection protocol



# How are we getting there?



NSPIRE Guiding Principles highlight continuous improvement, customer centricity, risk-based approaches, stakeholder engagement, and fostering relationships



- Engage experts
- Listen and incorporate feedback
- Prepare stakeholders for NSPIRE



- Wholesale redesign to program including standards and scoring
- Design with the users in mind
- Deploy a continuous improvement model



- Modernize inspection technology
- Optimize workflows
- Improve transparency
- Bring analytical tools to improve decision making



### **Rule & Standards**



# HUD published a proposed rule in January 2021 and the most recent version of the NSPIRE standards for public comment in June 2022 (with comments due 8/1/22). The rule and standards seek to:

- Require the same health and safety standards for all HUD housing portfolios, including privately owned properties where HUD-assisted residents reside (e.g., vouchers)
- Specify the manner and timeframe for the remediation of health and safety deficiencies for three categories of health and safety defects with specific remediation timelines
- Require an annual self-inspection and reporting requirement
- Outline the NSPIRE framework including standards and administrative processes such as appeals and enforcement
- Revise the approach to scoring to promote these policy objectives



# How does NSPIRE Emphasize Resident Safety? – Scoring



- Changed focus of scores away from cosmetic deficiencies and prioritization of physical assets to resident health and safety
- Higher weight placed on defects in units where residents spend their time
- Simplified scoring to include fewer inspectable areas
- Easier to calculate score to improve property self-inspections and compliance
- Maintained 100 point scale



## Sunset of HQS and UPCS



UPCS and HQS has been the standard by which to measure the physical condition of properties for over 20 years





### **Recent NSPIRE Achievements**



- Performed over 2,335 NSPIRE Demonstration inspections to evaluate NSPIRE Standards and processes
- Performed over 9,200 NSPIRE-V Demonstration inspections for the Voucher program
- Developed process models across the entire inspection lifecycle to include 13 process areas; developed over 220 use cases
- Developed the initial Federal IT application for testing in the field in the NSPIRE Demonstration
- Hosted 36 virtual workshops/webinars to date, which included over 1,400 attendees, to include executive directors, chief operating officers, and other Public Housing and Multifamily industry leadership, including academia and public health professionals
- Conducted four Customer Experience Workshops for HUD staff (additional external workshops to occur in 2023)
- Conducted eight Get Ready Session with over 764 participants





# **Upcoming Milestones**



#### FY2023

#### Winter

Publish Scoring, Administrative Procedures & Standards notices for public comment

Publish Final NSPIRE Rule, with future effective date

NSPIRE training begins

#### Winter/Spring

Publish final Standards, Scoring, & Administrative procedures notices

NSPIRE Pilot & ongoing training

#### **Spring**

Final NSPIRE Rule effective for Public Housing – April 1, 2023

#### Summer

Implement resident feedback from Pilot – June 30, 2023

Public Housing compliance date – June 30, 2023



#### **Fall**

Multifamily Housing, Vouchers, CPD effective & compliance Date – October 1, 2023





# **Key Takeaways**



- NSPIRE strengthens HUD's physical condition standards to emphasize resident health and safety
- NSPIRE is designed with the users in mind
- NSPIRE is a wholesale redesign to HUD's physical inspection program
- NSPIRE aligns Standards across rental assistance programs
- NSPIRE seeks to continually improve
- NSPIRE modernizes inspection technology





### Purpose

# SPIRE



To help PHAs, owners, managers and industry understand the rulemaking process

- Connect the dots on the NSPIRE Demonstration, NSPIRE proposed rule, and subordinate notices
- Review areas open for comment
- Ensure PHAs, owners and managers are ready for implementation



#### Introduction



- HUD's National Standards for the Physical Inspection of Real Estate (NSPIRE) will replace Uniform Physical Condition standards (UPCS) and Housing Quality Standards (HQS) in HUD regulations
- NSPIRE will:
  - Revise 24 CFR Part 5 Subpart G Physical Condition Standards and Inspection Requirements
  - Replace the term "UPCS" in the regulations and associated guidance
  - Re-define the term "HQS" to be synonymous with HUD's Part 5 Subpart G regulations

Note: HUD's section of the Code of Federal Regulations (CFR) is Title 24 and is often referenced as 24 CFR



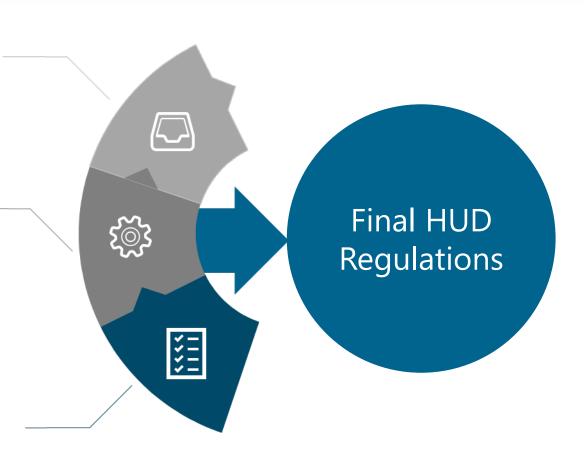
### **Inputs and Process**



HUD will consider public comments on the NSPIRE regulations, standards and scoring before they are final

HUD used the NSPIRE Demonstration to develop and test NSPIRE inspection process and standards

Implementing NSPIRE requires a rulemaking process with implementing "subordinate" notices in the Federal Register





### **NSPIRE Proposed Rule**



Revise 24 CFR Part 5 Subpart G - Physical Condition Standards

Replace the term "UPCS" in regulations and guidance

Re-define the term
"HQS" to be synonymous
with HUD's Part 5
Subpart G

NSPIRE Proposed Rule

Public Housing, Multifamily housing programs (e.g. PBRA, 202, 811), HCV, PBV, Section 8 Mod Rehab, HOME, HTF, ESG, CoC, HOPWA Additional implementation of Housing Opportunity Through Modernization Act of 2016 (HOTMA) & Economic Growth Act for Small Rural PHAs

Impacts 24 CFR Parts 5, 92, 93, 200, 574, 576, 578, 880, 882, 884, 886, 902, 982, 983, 985

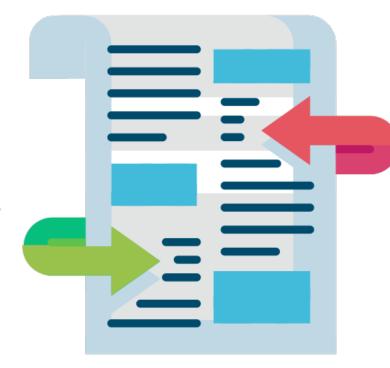


# **New Items in the Proposed Rule**



#### Changes introduced for comment:

- Standards review process every 3 years; additional categories for health and safety
- "Affirmatives" in regulation (e.g. GFCI outlets, lighting, HVAC, water safety)
- Remove site and neighborhood requirements (HCV programs)
- Special considerations for single room occupancy (SROs) units (HCV, CPD programs)
- New requirements for resolving health and safety deficiencies
- Self-inspections for Public and Multifamily Housing programs
- Administrative referrals to the DEC for scores 30 and below, and <60</li>





# **NSPIRE Implementing Notices**



The NSPIRE Rule will be implemented through "subordinate notices" and incorporate:



NSPIRE Standards Notice (proposed and final)



Scoring Notice (proposed and final)



Administrative Notice



Small Rural Public Housing Assessment System (PHAS) and Section 8 Management Assessment Program (SEMAP)



Implementing notices for Community Planning and Development (CPD) programs (HOME, HTF, ESG, COC, HOPWA)



Resident Feedback



#### **NSPIRE Standards Notice**



- Notice included 13 questions for comment on mold, safe drinking water, requirements for a permanent heating source, minimum temperature, electrical outlets, deficiency correction time frames and pest infestation
- Included an attachment with 63 "tables" covering individual housing components or hazard inspected
- Proposed updates to the HOTMA Life Threatening or "HOTMA LT" standards for conditions that must be resolved before move-in/24 hours if occupied in the voucher program





# **NSPIRE Scoring Notice**



- Will be published in Federal Register for comment
- Relevant to public housing and Multifamily housing program properties
- Scoring will reflect NSPIRE goals
  - Health and safety of residents over curb appeal, site conditions
  - Deficiencies in Units > Inside > Outside
- Notice will also include
  - What's changing from UPCS scoring
  - Methodology used to revise scoring
  - Expected sampling strategy
  - Justification for scoring decisions

# SCORING NOTICE

Proposed
Estimated
Late January



### **NSPIRE Administrative Notice**



- Information to submit in advance of inspection. REAC may collect:
  - Elevator, fire sprinkler certificates
  - Whether there are any current water safety alerts, name of public water system
  - Property construction date verification, scan of lead-based paint inspection (if built before 1978)
- Process for technical reviews
- Post inspection report process, how to report correction of deficiencies
- Communication with residents, making final inspections available for review
- Self inspection process
- Administrative referrals process for failing scores





### **Rulemaking Process**



Why is this taking so long? Why can't you just tell us more?

Federal rulemaking is covered by the Administrative Procedures Act and we must...

1. Make information available to all in the same way (Federal Register, website)

2. Take comments during a specified period, which post to a public docket

3. Issue a final rule with HUD's responses to comments received

4. Final rule will provide an effective date for the revised regulations



### Rulemaking Process Cont.



Proposed and final regulations and subordinate notices go through Office of Management and Budget (OMB) review

- Review by OMB is at least 90 days
- OMB also considers the full administrative and economic/cost impact of all regulations, and HUD's "Regulatory Impact Analysis" with the final rule



# **NSPIRE Inspections**



When will NSPIRE Inspections start?

When the rule is **final** and effective.\*



# **NSPIRE Inspections Cont.**





#### \*But also:

- NSPIRE Subordinate notices are published as final
- Consider there may be "compliance dates" in the final rule
- Public housing regs planned to be effective April 2023; HUD may delay inspections until July 2023
- Multifamily housing, HCV/PBV, Section 8 Mod Rehab and CPD programs planned for October 2023
- PHAs and owners will still get advance notice of scheduled inspections



# **Key Takeaways**



- HUD's physical condition standards are based on federal regulations and implementing notices
- Changes to federal regulations are completed with advance notice and fair opportunity for public comment
- HUD used the NSPIRE Demonstration to design and test the NSPIRE standards and inspection process
  - Note: Demonstration scores are not scores of record
- NSPIRE inspections will commence once the rule is final and effective. All regulations, policies, and effective dates are TBD until published as final
- "Hoping" for rule effective in April 2023 for public housing, and October 2023 for Multifamily Housing, HCV/PBV and CPD programs
- PH inspections will commence July 2023





# **Module Objectives**



- Define key focus areas for HUD's National Standards for the Physical Inspection of Real Estate (NSPIRE) Standards
- Describe new framework for physical inspections and key changes from UPCS/HQS to NSPIRE
- Demonstrate new deficiency rationales and categories
- Review key Standards
- Describe how to view NSPIRE Standards and available resources on HUD.gov





#### What is the Same?



- 40 standards remain mostly unchanged
- Life threatening H&S deficiencies require 24-hour repair timeframe
- Continued assessment on deficiencies in H&S and function and operability



# What is Changing?



- Moved away from 5 distinct inspectable areas: unit, common areas, building systems, site, building exterior
- Removed non-H&S items such as overgrown vegetation, nonsecurity/safety fence damage, common area paint peeling, damaged trim, common area paint peeling, exterior caulking damage, scratched counter tops
- Changed focus away from cosmetic deficiencies and prioritization of physical assets and the resident health and safety



### What is New?



- Consolidation of inspectable areas to 3: outside, inside, and unit
- More stringent requirements for heating, call-for-aid systems, GFCI/AFCI, electrical outlets, mold, infestation, and structural systems
- Enhancement to smoke alarms, CO detectors, fire doors, dryer exhaust, guardrails and handrails
- Revised H&S classifications and timeframes increased urgency to 24-hour repair for life threatening and severe non-life threatening items and 30-day repair for moderate deficiencies



### **Deficiency Classification**





- Health & Safety (H&S) make up most of the NSPIRE deficiencies because they are focused on the most critical elements that impact resident safety and habitability
- Two other categories of NSPIRE deficiencies:
  - Function and Operability (F&O)
  - Condition and Appearance (C&A)
- These deficiencies will make up a much smaller portion of overall NSPIRE deficiencies
- These new categories allow HUD to focus on the most important defects and conditions to support healthy and safe homes



### **H&S Determinations**



#### **Life Threatening**



Deficiencies that, if evident in the home or on the property, present a high risk of death or severe illness or injury to a resident.

#### Severe Non-Life-Threatening



Deficiencies that, if evident in the home or on the property, present a high risk of permanent disability, or serious injury or illness, to a resident; or the physical security or safety of a resident or their property would be seriously compromised.

#### **Moderate**



Deficiencies that, if evident in home or on property, present a moderate risk of an adverse medical event requiring a healthcare visit; cause temporary harm; or if left untreated, cause or worsen a chronic condition that may have long-lasting adverse health effects; or that the physical security or safety of a resident or their property could be compromised.

#### Low



Deficiencies critical to habitability but not presenting a substantive health or safety risk to residents.



## Inspectable Areas



NSPIRE establishes the three inspectable areas of a REAC inspection into three easily identified locations: Unit, Inside, and Outside.

- This increases the usability of the standards and streamlines the inspection process
- Ensures that all residents live in safe, habitable homes, the items and components located inside the building, outside the building, and within the units of HUD housing must be functionally adequate, operable, and free of health and safety hazards
- This streamlined approach allows inspectors to cite deficiencies based on where they are standing and eliminates potential subjectivity or ambiguity about a deficiency's location



### Inspectable Areas Continued

# SPIRE

#### Unit

A "Unit" of housing refers to the interior components of an individual dwelling, where the resident lives.

#### Inside

"Inside" refers to the common areas and building systems within the building interior and are not inside a unit. This could include interior laundry facilities, workout rooms, etc.





#### **Outside**

"Outside" refers to the building site, building exterior components, and any building systems located outside of the building or unit. This includes things like sidewalks, parking lots, and retaining walls.

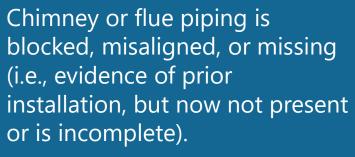


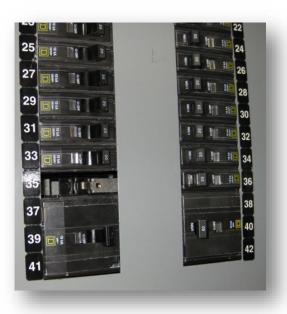


# **Example Unit Health & Safety Defects**









Electrical conductor is not enclosed or properly insulated (e.g., damaged sheathing, open port, missing knockout, missing outlet or switch cover, missing breaker or fuse, or missing lightbulb).



Smoke alarm is not installed inside each sleeping area, outside each sleeping area, and on each level.



## **Core Health & Safety Focus**



The eight focus areas are critical to the habitability and safety of residents





## **Addressing Fire Safety**



#### **NSPIRE** improves fire safety standards in several ways from UPCS



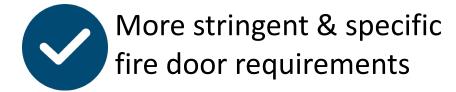


Permanent heating source requirement

Prohibition of unvented space heaters

New fire sprinkler defects related to the proper functioning of these systems

GFCIs, AFCIs, CO alarms, dryer exhaust, and electrical outlets







#### **NSPIRE conforms with (NFPA 72)**

 NFPA 72 is the preeminent national standard for smoke alarms and fire and existing Housing Quality Standards for vouchers align with this standard

#### NSPIRE Smoke Alarm Standards Conform with 2019 NFPA 72 Requiring:

At least one working smoke alarm installed on every level of property

At least one working smoke alarm installed outside every sleeping area At least one working smoke alarm installed inside each bedroom

 Lack of conformance with the NSPIRE smoke alarm standard requires mitigation within 24 hours

#### Within two years new NFPA 72 fire safety requirements will be in effect

• Fire alarms without sealed ten-year batteries will need to be fully replaced





Properly functioning heating systems are critical to maintain healthy unit temperatures and prevent fires in public housing

Housing Opportunity through Modernization Act directed HUD to set minimum temperature standards

- PIH Notice 2018-19 set a minimum heating temperature standard for public housing
- The PIH notice set 68 degrees, which is carried over into NSPIRE

Forthcoming NSPIRE Standards Notice will contain the heating source and space heater requirements





## Properly functioning fire doors are critical to slow the spread of an active fire in buildings

Fire doors have been addressed in NSPIRE with a standard specific to fire doors

Under UPCS fire doors were inspected and cited with other non-fire doors

The fire door standard details the specific function, operability and structural integrity requirements for fire doors

Defects and deficiency criteria will be based on research and discussions with fire safety professionals





#### Properly functioning fire sprinklers are critical for the suppression of fires

Current NSPIRE
version has
additional defects
and criteria

- Deficiency criteria is more detailed and objective
- New deficiency for obstruction of the spray area
- Some deficiencies have elevated severity levels



## **Additional Fire Safety Items**



#### **New Electrical Life Safety Deficiencies include:**

Ground Fault Circuit Interrupters

Arc Fault Circuit Interrupters

Properly Wired Outlets

**Grounded Outlets** 



## **Addressing Water Safety**



Water safety was introduced through the NSPIRE Proposed Rule

HUD recognizes the EPA is the government agency tasked with testing and measuring water quality

HUD is considering collecting information on local water outages or water quality alerts

HUD is considering recording observations of lead water service lines in HUD assisted properties



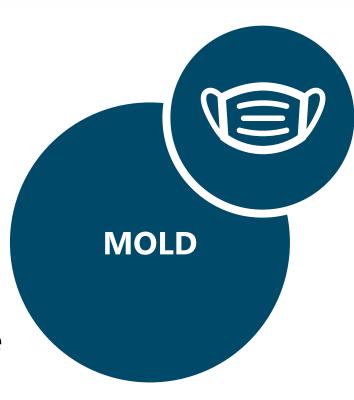


## **Addressing Mold & Moisture**



## NSPIRE takes a comprehensive approach to mold and moisture

- Objective and measurable mold deficiency criteria that recognizes different severity levels
- The current mold standard also contains a deficiency for ventilation or dehumidification of bathrooms
- The most recent leak standard contains multiple deficiencies with specific criteria to capture a broad range of plumbing and environmental leaks
- NSPIRE is considering requiring the use of moisture meters and recommending the use of infrared cameras during inspections

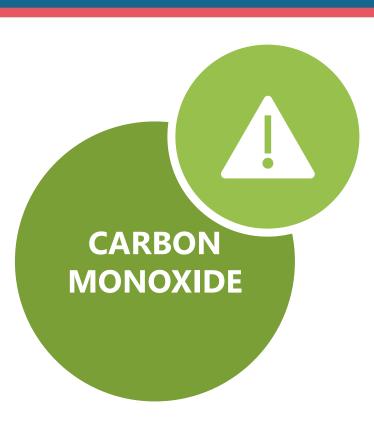




#### **Carbon Monoxide Alarms**



- Transitioning from a survey question to an enforceable standard
- 2021 Consolidated Appropriations Act included a statutory requirement for CO alarms to be installed with the requirements of the 2018 International Fire Code
  - Effective date of requirement is December 27, 2022
  - Chapters 9 & 11 of the 2018 IFC contain the specific installation requirements & are available free online
- REAC will be publishing a PIH notice for the implementation of the CO requirements within UPCS before the NSPIRE final rule is published and effective
- Future publication of a decision tree for CO installation



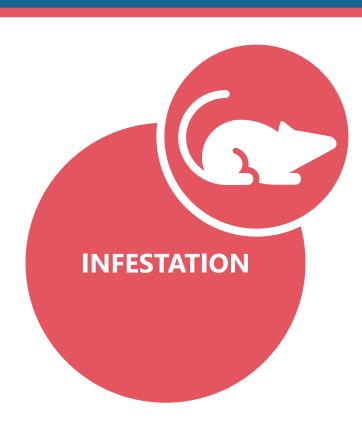


## **Addressing Infestation**



#### **NSPIRE** infestation standards are changing

- Objective deficiency criteria
  - Specific observed numbers of pests result in different severity levels
- REAC is considering alternative correction options and longer time frames for properties using industry best practices
  - An example of best practices would be integrative pest management





## **Addressing Lead Based Paint**



#### **NSPIRE** will have a different approach than UPCS

- Current lead-based paint standard
  - Incorporates requirements from HUD's Lead Safe Housing Rule regulations for the voucher program
  - In buildings constructed before 1978, inspector will perform a visual assessment for deteriorated paint in units with children under age 6
  - NSPIRE does not replace HUD's safe lead requirements





## **NSPIRE Standards Webpage**



#### You can find the standards on the NSPIRE Standards web page

#### This web page provides:

- Ability to view the standards and download:
  - Single standards
  - All standards in a zip file
- Guidance for navigating the standards
- Access to previous versions of the standards
- Guidance for submitting feedback will be provided when the feature is available



## **NSPIRE Standards Webpage**



#### **Standards Update**

HUD published the Proposed National Standards for the Physical Inspection of Real Estate (NSPIRE) in the Federal Register on June 16, 2022. The public comment period closed on August 1, 2022. The final set of standards will be published in the Federal Register following HUD's review and adjudication of public comments.

#### **Current Standards**

CTANDADDC	Version	Last Updated	Inspectable area(s) standard applies to:		
STANDARDS			Unit	Inside	Outside
Address and Signage Standard	2.2	06-23-2022			Y
Bathtub and Shower Standard	2.2	06-23-2022	Y	Y	
Cabinets Standard	2.2	06-23-2022	Y	Y	
Call-for-Aid System Standard	2.2	06-23-2022	Y	Y	
Carbon Monoxide Alarm Standard	2.2	06-23-2022	Y	Y	
Ceiling Standard	2.2	06-23-2022	Y	Y	

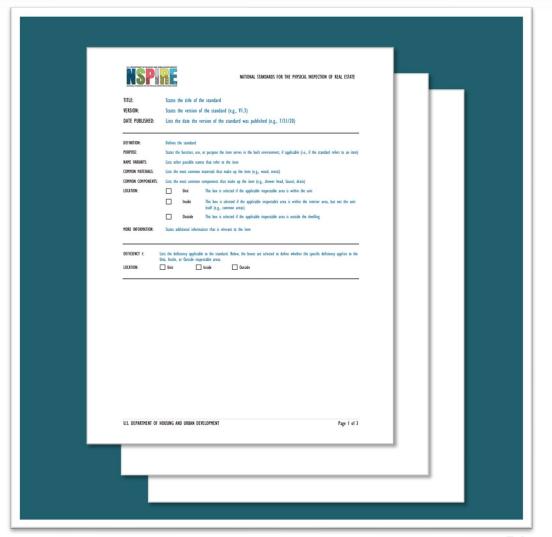


#### **NSPIRE Standards Template Guide**



To help inspectors, quality control reviewers, and other stakeholders understand the terminology and layout of the NSPIRE standards, HUD developed a standards template guide to provide:

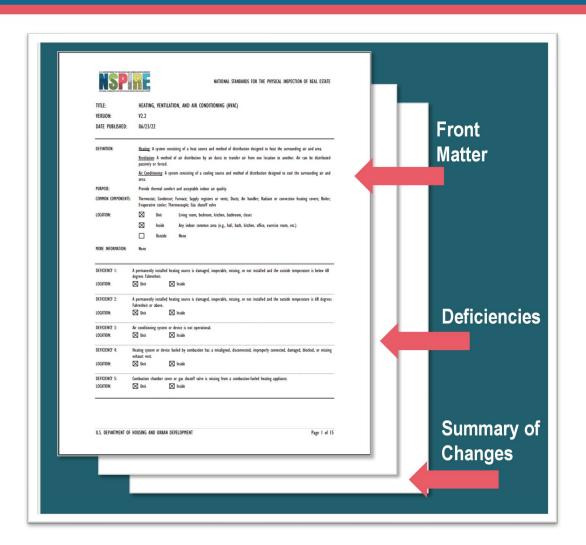
- Terminology
- Layout of the standards
- An overview of each component section of a standard, from front to back





#### **Organization of NSPIRE Standards**





HUD redesigned the format and language of the Standards

- Beginning section (front matter)
  - o Defines the inspectable item
  - Summarizes the deficiencies
- Deficiencies
  - In order of inspectable area
  - Provides additional information on the process to inspect the deficiency
- Summary of Changes lists revisions to the standard



## **Deficiencies - Inspection Process**



#### **Example Standard: Door – Fire Labeled**



NATIONAL STANDARDS FOR THE PHYSICAL INSPECTION OF REAL ESTATE

DEFICIENCY I — UNIT: FIRE LABELED DOOR DOES NOT OPEN.

DEFICIENCY CRITERIA: Fire labeled door does not open such that it may limit access between spaces.

HEALTH AND SAFETY DETERMINATION:

The Moderate Health and Safety category includes deficiencies that, if evident in the home or on the property, present a moderate risk of an adverse medical event requiring a healthcare visit; cause temporary harm; or if left untreated, cause or worsen a chronic condition that may have long-lasting adverse health effects; or that the physical security or safety of a resident or their property could be compromised.

CORRECTION TIMEFRAME: 30 days HCV PASS / FAIL:

HCV CORRECTION TIMEFRAME: 30 days

INSPECTION PROCESS:

OBSERVATION: - Identify all fire labeled doors within the Unit.

- If the door is locked, ask the resident or POA to unlock the door.

ACTION:

- With the door closed, engage the doorknob or handle to verify if the door opens to permit reasonable access

- Fire label or plug may be located on the edge of the door slab between the middle and top hinge or on the top and hinge side of the jamb or frame.
- If unable to determine if a label is present, then evaluate the door under the Door General Standard or Door
- Entry Standard, respectively.

- Each deficiency includes an Inspection Process section
- **Inspection Process subsections:** 
  - Observation
  - Request for Help (e.g., from resident or POA)
  - Action
  - More Information



### **Summary of Changes**



- As part of its continuous improvement of NSPIRE, HUD documents the revisions it makes to each standard
- The Summary of Changes is provided at the end of each standard and lists:
  - Fields updated in the standard
  - Revision dates starting with the most recent version



NATIONAL STANDARDS FOR THE PHYSICAL INSPECTION OF REAL ESTATE

#### SUMMARY OF CHANGES

TITLE: ADDRESS AND SIGNAGE

VERSION: V2.2

DATE PUBLISHED: 06/23/22

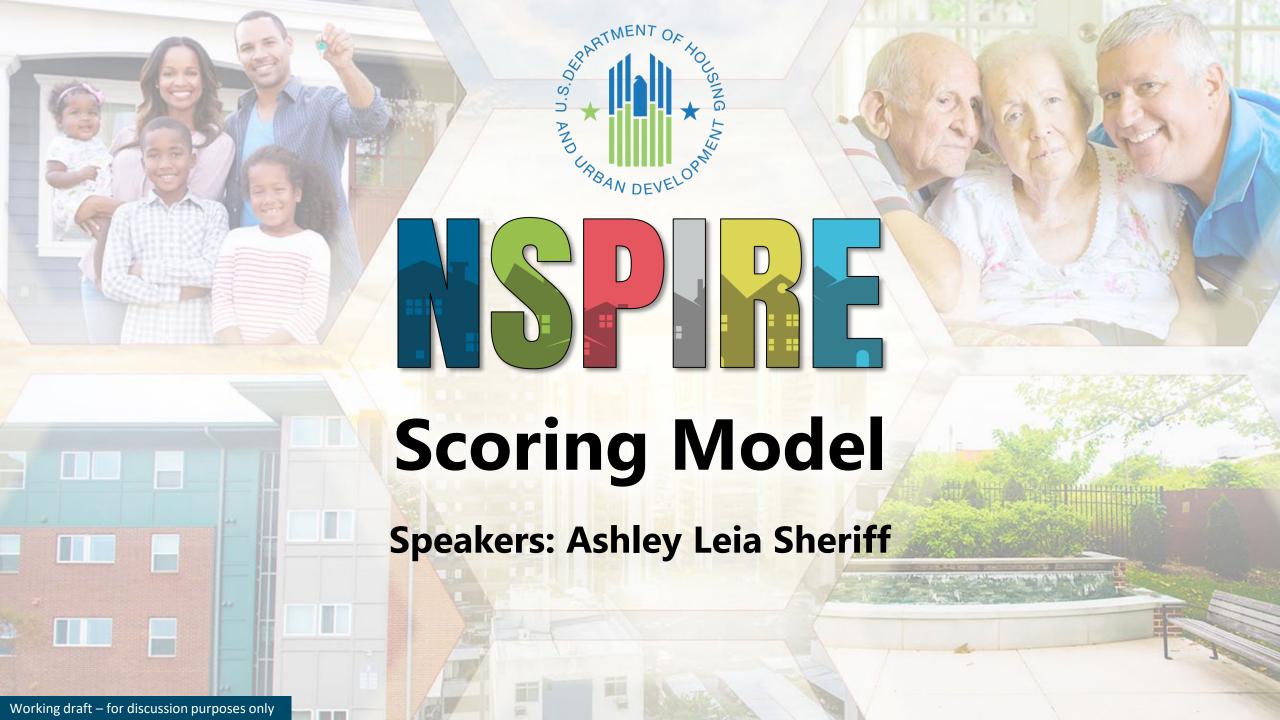
FIELD	CHANGE	VERSION	Date
	Abbreviated published version	V2.2	2022-06-23
	Removed from published version		
	Removed from published version		
	Removed from published version		
Tools or Equipment	Removed from published version		
Deficiency I		V2.2	2022-06-23
,	Relabeled from "Standard" to "Moderate"		
	Copy edits	V2.1	2021-04-02
Deficiency I		V2.0	2020-10-28



#### **Key Takeaways**



- NSPIRE strengthens HUD's physical condition standards to emphasize resident health and safety in their units
- NSPIRE aligns inspection standards across all HUD-assisted properties, as directed by Congress
- Get ready now for changes to come (e.g., check fire doors, smoke detectors, carbon monoxide alarm)
- NSPIRE Standards can be found on HUD.gov





#### **Purpose**



#### By the end of this module you will be able to:

- Contrast the mechanics of UPCS Scoring Model with the proposed NSPIRE Inspection Scoring Model features
- Align proposed NSPIRE goals with NSPIRE Inspection Scoring Model features
- Perform a simplistic scoring exercise
- Understand proposed changes to the sampling methodology
- Comprehend the applicability to PHAS



#### **Background - UPCS Scoring Model**



#### **100-point score scale:**

 The best possible inspection score is 100 and deficiencies generally cause the inspection score to decrease by some amount

#### **Item and Area-Based Limits**

 Under UPCS, the total score of 100 is comprised of five area scores that each comprised a certain limited percentage of the total score

#### **Criticality and Severity Level:**

 Under UPCS, each "item weight" is multiplied by a predetermined severity and criticality level

Area	Typical % of Property Inspection Score		
Units	35		
<b>Building Systems</b>	20		
Common Areas	15		
<b>Building Exterior</b>	15		
Site	15		

Criticality Level	Multiplier Value
5	5.00
4	3.00
3	2.25
2	1.25
1	0.50

Severity Level	Multiplier Value
3	1.00
2	0.50
1	0.25



#### **Background - UPCS Scoring Model**



#### **Item and Area-Based Limits**

- Further, each area is inspected for specific items.
  - For example: if a kitchen has 10 inspectable items (e.g.., door, ceiling, cabinet, floor, lighting, HVAC, etc.,) each of the 10 items (if present) have a 10% "item weight"
- When a deficiency is cited, the impact that the deficiency has on the area score relates to this "item weight" that is subsequently multiplied by a few additional values, which are shown and described on the following slide



# Draft NSPIRE Physical Inspection Model Features



# **UPCS Comparison to NSPIRE Scoring Model**



UPCS	NSPIRE
Complex system of weightings, multipliers, and limits	Simplified three-step scoring system
Unsafe properties could still receive a passing score for a variety of reasons, including mechanisms of "capped" item and area weights	Unsafe properties will not receive a passing score due to focus on Health & Safety and Unit-based defects
Item and area weights could sometimes cause less important defects to disproportionately factor into inspection scoring	Defect Impact Weights Table makes clear the hierarchy of defect importance on Inspection Score



## **NSPIRE Draft Scoring Model**



#### Draft Defect point system:

- Each deficiency causes the inspection score to decrease by some prescribed amount according to severity and location
  - **Health and safety (H&S)** make up most of the NSPIRE deficiencies because they are focused on the most critical elements that impact resident safety and habitability
- Sum of "Defect Points" will be normalized to accommodate different property sizes



## **Defect Examples**



	Outside	Inside	Unit
Life- Threatening	Gas dryer exhaust ventilation system has restricted airflow.	Structural system exhibits signs of serious failure.	Flammable or combustible material is on or near an ignition source.
Severe, Non- Life- Threatening	A sharp edge that can result in a cut or puncture hazard is present.	Fire labeled door does not close and latch or self-close and latch.	Call-for-aid system is blocked.
Moderate	Trip hazard on walking surface.	Plumbing leak that allows for water intrusion in unintended areas.	Refrigerator component is damaged such that it impacts functionality.
Low	Water runoff is unable to flow through the site drainage system.	Auxiliary lighting component is damaged or missing.	Presence of mold-like substance at very low levels is observed visually.



## **NSPIRE Draft Scoring Model**



The **Notional Draft Defect Impact Weights Table** shown below is the backbone of the scoring model

	Outside	Inside	Unit	
Life-Threatening	**** **** **	**** ***	**** ****	24-hour remediation
Severe	***	****	****	remediation
			*	
Moderate	****	***	***	30-day remediation
Low	*	**	***	Defect Impact Weights are in the process of being finalized.



## **Draft Scoring 3-Step Process**



Under the draft NSPIRE Scoring Model, the steps to score an inspection are as follows:

- Count defects of each type. Multiply counts by values in Defect Impact Weights table (shown in the previous slide). Sum all results. Calculation yields total defect points
- 2. Size-adjust total defect points
  - Divide total defect points by number of units inspected to adjust for property size
- 3. Subtract size-adjusted defect points from 100 to calculate 0-100 score



# (Proposed Feature) Categorization into Letter Grades



Grade A	Good condition with the least number of concerning defects. Aligns with "Standard 1 Performing Property."	Inspection every 3 years	>=90	Passing
Grade B	Good condition but with more concerning and yet easily addressable defects. Aligns with "Standard 2 Performing Property."	Inspection every 2 years	>=80<90	Grade
Grade C	Okay condition with higher number of concerning and yet addressable defects. Close monitoring is needed. Aligns with "Standard 3 Performing Property."	Inspection annually	>=70<80	Substandard
Grade D	Challenged condition with high prevalence H&S defects that may not be easily addressable. Close monitoring is needed. Aligns with "Standard 3 Performing Property."	Inspection annually	>=60<70	Grade
Grade E	Failing condition with high prevalence of concerning H&S defects. Close, regular monitoring needed. Administrative action may be needed to protect residents.	Higher inspection frequency	>30<60	   Failing
Grade F	Failing condition with extremely high prevalence of concerning H&S defects. Actions should be taken to protect residents. Referred to DEC.	Highest inspection frequency	<=30	Grade 69

Working draft – for discussion purposes only





## Draft NSPIRE Sampling Plan



## **Draft NSPIRE Sampling Plan**



- Not Finalized currently undergoing calibration
- Draft NSPIRE Sampling Plan:
  - Number of Units Sampled during inspections may increase under NSPIRE
  - Buildings may be inspected with a likelihood that is related to their number of units (e.g., buildings with higher unit counts are more likely to be inspected)
  - Resident-selected Units may be supplemental to the Inspection Sample





### **Key Topics**



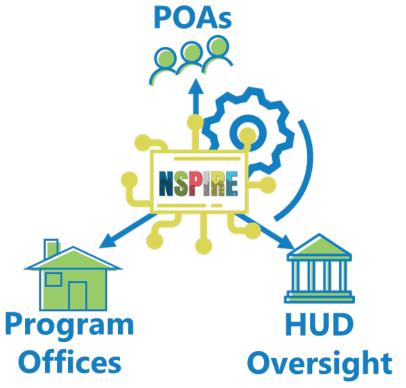
Delivering on NSPIRE is built on top of process improvements, talented people, and the use of state-of-the-art technology

- Service delivery model
- Inspection process (i.e., before, during, after the inspection)
- NSPIRE benefits
- Preparation for day 1 (i.e., planning, development, training)



### **Revitalized Service Delivery Model**





We value our customers and seek to prioritize improvements that reestablish relevance and align services with customer needs

ENHANCED CONNECTIVITY

to accelerate housing quality improvement

Connected Property Owners and Agents (POAs), HUD Oversight (i.e., REAC, OFO, DEC), and Program Offices increases transparency and coordination

ENHANCED OPERATIONS

to streamline business processes & user experience

Real-time data and intuitive automated workflows improve business processes focusing on timely detection, remediation, and improvement of homes

ENHANCED TECHNOLOGY

to increase productivity and data analytics

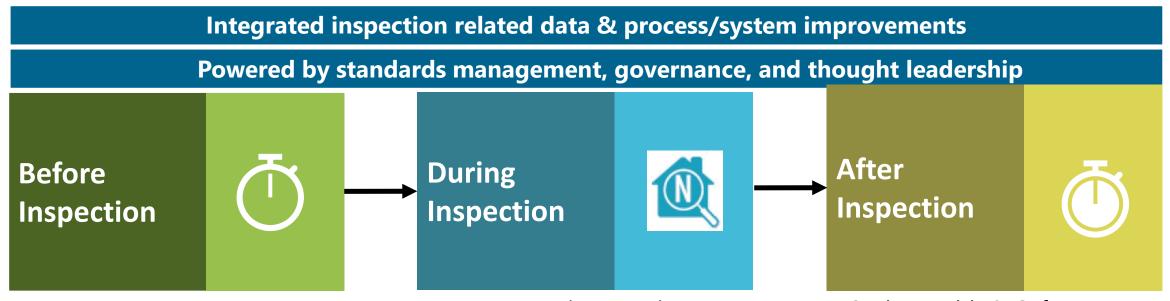
Modern, digital experience improves portfolio management, risk assessment, and predictive analytics



### Improvements to Operations



- What happens before, during, and after inspections is changing
- We are designing as digital an experience as possible



Inspector/Property
Coordination
Property Documentation
Final Inspection Confirmation

Inspection Routine
Identifying Deficiencies
Recording Deficiencies
User Centered Design IT

24-hr Health & Safety Report POA Acknowledgement



### **Before-Inspection Highlights**



- POAs will receive automatic emails directing them to verify their property profiles prior to inspection
- POAs will have access to an integrated dashboard to update property information including certificate upload (elevator, fire extinguishers, etc.)
- Continued effective coordination between NSPIRE inspectors and POA once inspection is scheduled
- HUD upgraded back-end automated systems to streamline internal inspection administrative processes (i.e., scheduling, inspectors' roles)



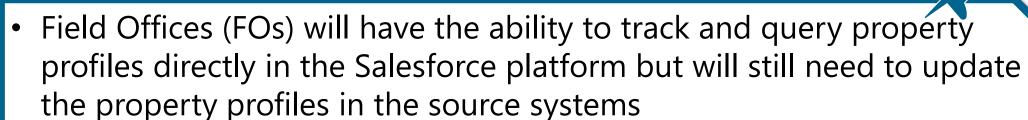


### **Inventory Management**



Inventory Management is the process to ensure that property inventory for the inspection line of business are complete and accurate

#### Inventory Management – Key Changes 🤚



- Processes will be streamlined to notify down stream customers when to verify and update property profiles prior to an inspection thus resulting in increased inventory accuracy
- Variance report will identify properties with inconsistent, incomplete, or inaccurate profiles based on the inspection



### **Ordering**



Ordering is the process for creating property inspection orders

#### Ordering – Key Changes +



- Generate a collection of Inspection of Record Orders including properties to be inspected, which are then automatically routed to FOs and Program Offices (POs) for review and approval
- FOs new responsibility includes examining new orders for issues, or delaying the inspection for any property in the collection
- FOs and POs will receive automated notifications when orders are placed to vendors
- Ad-hoc orders initiated as "one-off" inspections performed as a result of Congressional inquiry, low scores, high risk, etc.



### Scheduling



Scheduling is reengineered to include an Integrated Master Schedule (IMS) on Salesforce to improve resource, workload, and financial planning.

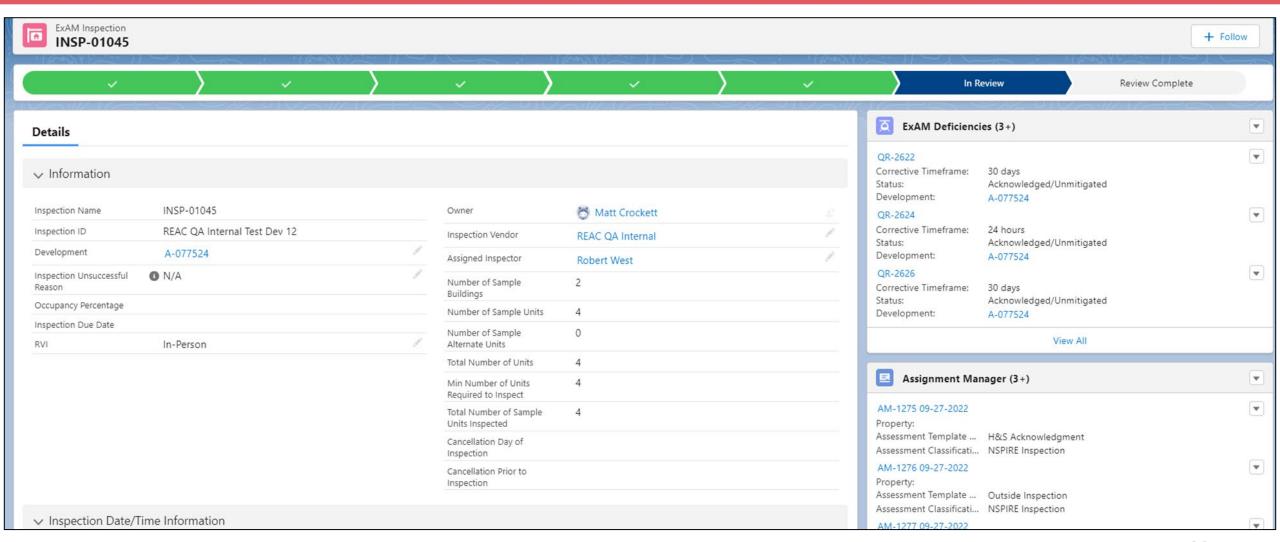
#### Scheduling – Key Changes 🛗

- Vendors and POAs will have access to view scheduled inspections associated with their organization
- Prior to inspection day POAs will:
  - Receive an email link to their property profile for validation
  - Interface with a single platform to verify and update property profiles and view scheduled inspections
  - Upload certificates to Salesforce (e.g., fire suppression, elevator, boiler)
  - Provide an accurate point of contact to generate work orders and close out H&S items



### **Tracking & Managing Inspections**







### **During Inspection Highlights**



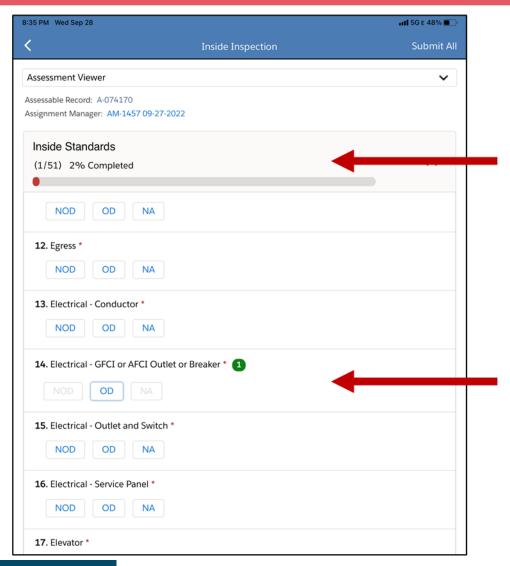
- Actions on the day of inspection are streamlined due to:
  - Previous validation of property profile information
  - Previous validation of profile sampling variables such as offline buildings and units, vacancy rates, and converted units (if applicable)
  - More efficient visual verification of properties based on "real time" information
  - Modern inspection software

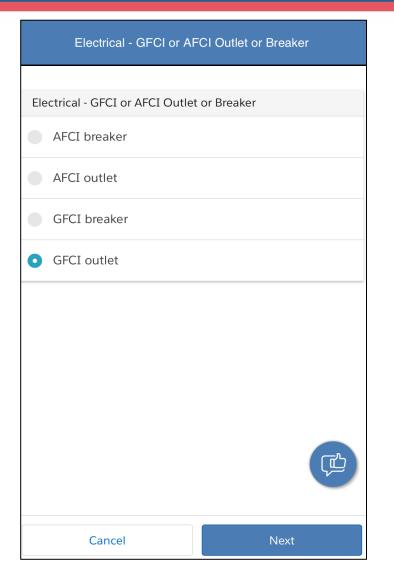




### **Discussion – App Features**



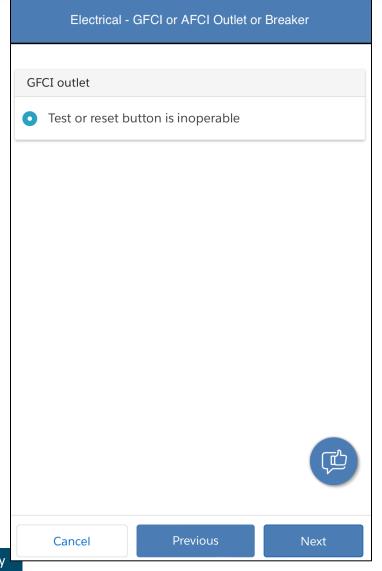






### **Discussion – App Features**



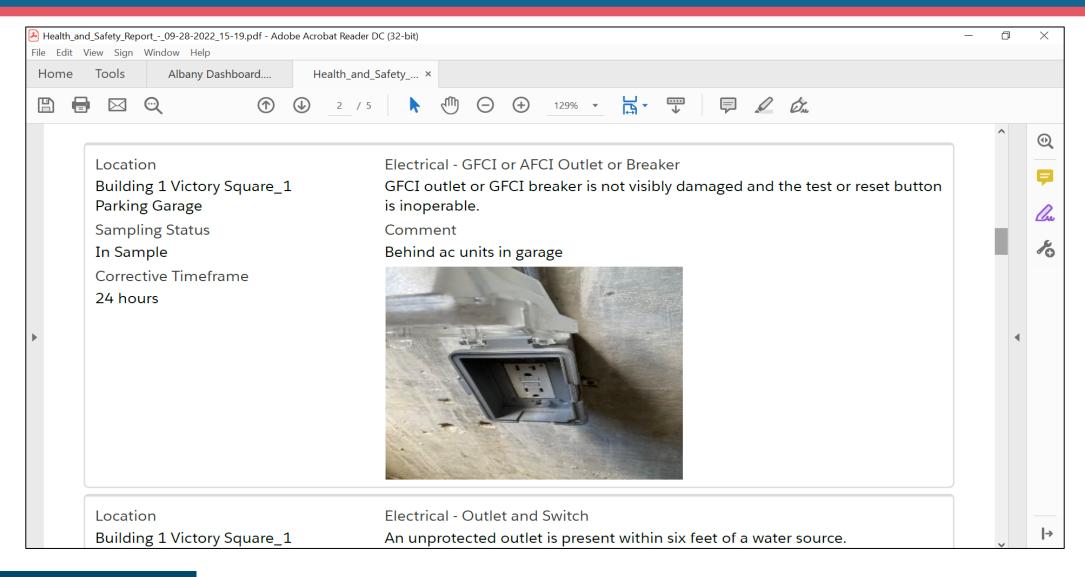


Electrical - GFCI or AFCI Outlet or Breaker
Corrective Timeframe
24 hours V
Image
* This field is required
Add Image
Comment
Does not test
Room Inside
Garage <b>C</b>
Cancel
Record Deficiency



### **Discussion – App Features**







### **After-Inspection Highlights**



- Property representatives given health & safety reports daily, acknowledge receipt electronically and have immediate access to H&S report via automated links
- Information flows and timeliness between QC reviewers, Inspection Vendors, and POAs will be improved
- The inspection report format will be more user friendly
- Under NSPIRE, deficiencies have specific mitigation/repair timeline requirements (i.e., 24-hrs, 30-days)





### **Health & Safety**



#### Health & Safety – Key Changes 🕕

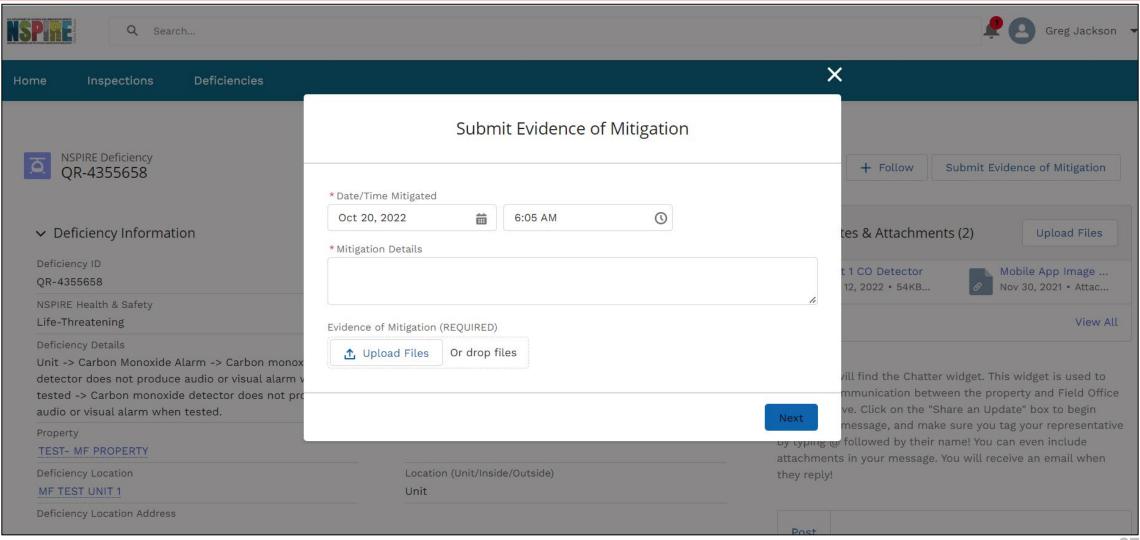


- Records will be created and tracked through resolution including POA mitigations, supporting documentation, and FO verification
- Multifamily and public housing organizations will receive H&S reports by their field office and region
- Automated notifications for: open H&S items; items awaiting mitigation; insufficient defect resolution; and, when defect resolution is complete
- Health & Safety reports are now electronically signed



# Submitting Evidence of Mitigations for Health & Safety Deficiencies

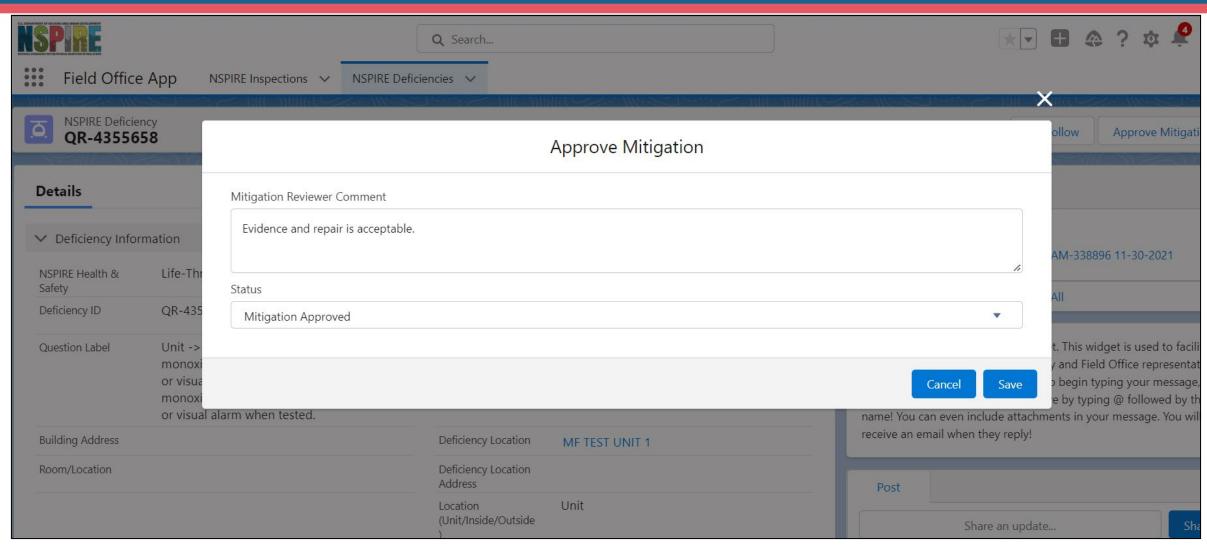






# Reviewing & Adjudicating Health & Safety Deficiencies Mitigations







### **Appeals**



Appeals is the process responsible for POAs submitting appeal requests associated with an inspection on their property

#### Appeals – Key Changes 🖍



- POAs will submit appeals digitally via Salesforce
- Appeals lifecycle management is streamlined thereby improving visibility, tracking and reducing process cycle times



### Sample Reports and Dashboards



NSPIRE Demo Inspections Running Total

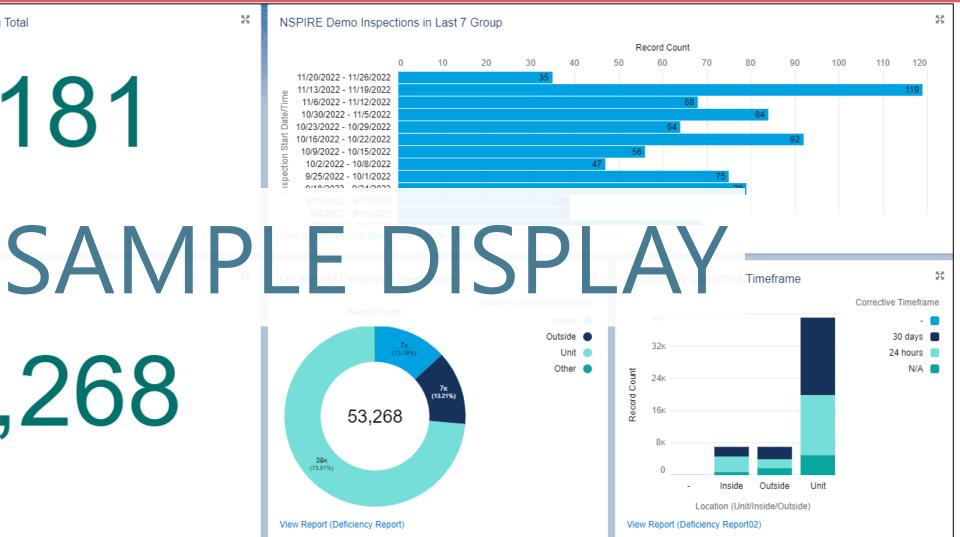
2,181

(does not include 24 Sharepoint inspections) View Report (ExAM Inspections for NSPIRE)

Total Number of Deficiencies

53,268

View Report (Deficiency Report)

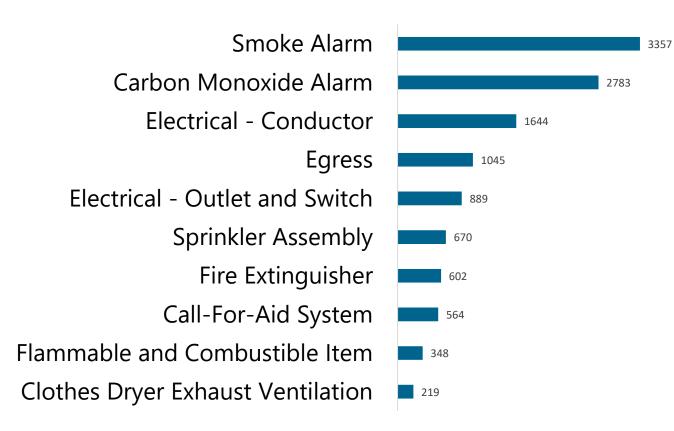




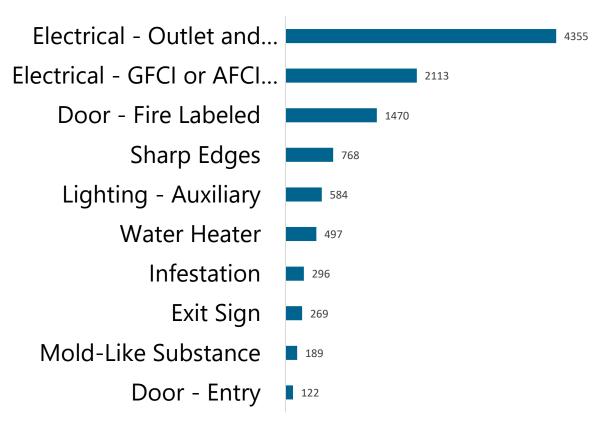
## **Top Defects Based on Demonstration**



## Top 10 Most Occurring Life Threatening Defects



#### Top 10 Most Occurring Severe Non-Life Threatening Defects





### **Benefits to POAs & Field Staff**



#### For Property Owners & Agents:

- Efficient coordination and scheduling
- System generated health and safety notifications and instructions for appropriate users
- Enhanced case management for appeals
- Technology solution can integrate with required systems such as property source systems, procurement systems, and financial systems
- Refreshed scoring model promotes emphasis on health and safety of residents

#### For Field Staff:

- Improved transparency and communication from REAC to equip Field Staff to provide tailored support to its customers
- Manually intensive tasks are automated to maximize staff's efforts on high value, high return items
- Direct input from staff informs ongoing NSPIRE process design and continuous improvement



### **Planning for Day 1**



	CALENDAR YEAR 2023										
HHV	ALIC	CEDT	ОСТ	NOV	DEC	IANI	CED	NANDCH	A DDII	NANV	HINE

JULY | AUG | SEPT | OCT | NOV | DEC | JAN | FEB |MARCH| APRIL | MAY | JUNE

#### **Stage 1 – Learning**

Evaluate standards, evaluate protocol, & research initial IT

#### **Stage 2 – Testing**

Conduct inspections to collect data, perform field evaluation QA (i.e., side by side), & refine scoring model

#### Stage 3 – Pilot

Evaluate end-to-end lifecycle operations



NSPIRE Standards & Inspector Protocol Processes Refinement

System Development, Testing, and Improvement



### **Training Preparation for Go-Live**



CA	•		JD	ΛD	VEA	D	2023
$\sim$		LI	v	ЛΝ			2023

JAN FEB MARCH APRIL MAY JUNE



#### **Training Development**







Get Ready Series, Office Hours, Webinars, FAQs

#### **Audience Groups:**

- Federal Inspectors
- Contract Inspectors
- POAs

- Property Maintenance Staff
- Service Mortgagees
- Field Office Staff

#### **Topics:**

- Standards
- Application
- Protocol
- Back End Processes

#### Training Publishing

Full NSPIRE toolkit will be available on the HUD.gov NSPIRE webpage

https://www.hud.gov/program\_offices/ public\_indian\_housing/reac/nspire



### **Key Takeaways**



- NSPIRE strives to enhance connectivity, enhance operations, and enhance technology through the end-to-end inspection life-cycle for stakeholders
- POAs and Field staff will see benefits of streamlined workflows and reduction in manual work to improve property quality oversight
- The NSPIRE Demonstration serves as an opportunity to gather input from stakeholders, refine processes, and ensure all mechanisms are in place to facilitate the nationwide go-live
- Training will be provided for impacted groups

